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January 25, 2005

IN THE UNITED STATES RECEIVING OFFICE
AS THE DO/EO OF THE PATENT COOPERATION TREATY

In re application of Carlo Bertucci and Guy Felix
U.S. Application No. 10/501,067
Filed: July 9, 2004

Examiner: N/A
Group Art Unit: N/A
Confirmation No. 3245

Highly Homogenous Serum Albumin as Chiral Selector

Attorney Docket No. P27,959 USA

CERTIFICATE OF MAILING

The undersigned hereby certifies that the enclosed correspondence, along with any other documents indicated as being enclosed, is being deposited as first class mail, postage prepaid, with the U.S. Postal Service in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on January 25, 2005.


Barbara G. Makariou

Mail Stop Amendment
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**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(B)**

Sir:


It is requested respectfully that the information identified on the enclosed Form PTO-1449 (Modified) be made of record and considered with respect to the above-referenced patent application. A copy of each non-U.S. patent publication identified on the Form is enclosed. The Examiner is requested to indicate that each

item on the enclosed Form PTO-1449 (Modified) has been considered by initialing and dating the enclosed Form and returning a copy of same to the undersigned.

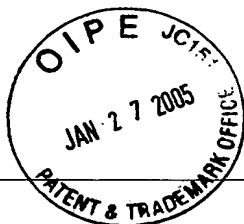
This Information Disclosure Statement is filed before a first Office Action on the merits. Identification of information on the attached Form, or in this statement, is not an admission that such information is prior art to the invention claimed in the present application or that such information is in an analogous art area.

The Commissioner is authorized hereby to charge any fees or credit any overpayment associated with this Statement (copy enclosed) to Deposit Account Number 19-5425.

Respectfully submitted,


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Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. P27,959 USA	Application No. 10/501,067
	Applicant(s) G. Bertucci and G. Felix.	
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U.S. PATENT DOCUMENTS

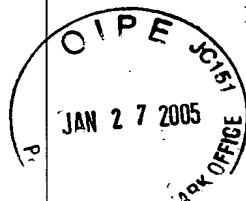
Examiner Initials		Document No.	Date	Name	Class	Subclass
	AA	6,150,504	11/21/2000	Van Der Laken et al.	534	360

FOREIGN PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Country	Translation	
					Yes	No
	AA	EP 060057	24/2/1982	EPO	X	
	AB	EP 073646	25/8/1982	EPO	X	
	AC	EP 286424	8/4/1988	EPO	X	
	AD	EP 428758	15/6/1990	EPO	X	
	AE	EP 431880	4/12/1990	EPO	X	
	AF	EP 452753	6/4/1991	EPO	X	
	AG	EP 0658569	16/12/1994	EPO	X	
	AH	WO 90/13653	15/11/1990	PCT	X	
	AI	WO 94/04687	3/3/1994	PCT	X	
	AJ	WO 95/23857	8/9/1995	PCT	X	
	AK	WO 95/33833	14/12/1995	PCT	X	
	AL	WO 96/3751	28/11/1996	PCT	X	
	AM	WO 90/01063	08/02/1990	PCT	X	
	AN	WO 00/44772	3/8/2000	PCT	X	
	AO	JP 3258728	11/19/1991	JAPAN	X	

Examiner	Date Considered
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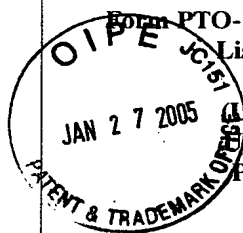
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Domenici, E. et al.: "Synthesis and Chromatographic Properties of an HPLC Chiral Stationary Phase Based upon Human Serum Albumin"; <i>Chromatographia</i> , 29:170-176 (1990)
	Bertucci, C. et al.: "Reversible and Covalent Binding of Drugs to Human Serum Albumin: Methodological Approaches and Physiological Relevance"; <i>Current Medicinal Chemistry</i> , Vol. 9 pp.14631-481 (2002)
	Wang Pen-Cheng et al.: "High Resolution Chiral Separation Using Microfluidics-Based Membrane Chromatography"; <i>Journal of Chromatography</i> , Vol. 942(12) pp.115-122. 2002
	Masura, Kato et al.: "A Protein-Encapsulation Technique by the Sol-Gell Method for the Preparation of Monolithic Columns for Capillary Electrochromatography"; <i>Analytical Chemistry</i> , Vol. 74 pp. 1915-21 (2002)
	Tao & Gilpin: "Liquid Chromatographic Studies of the Effect of Phosphate on the Binding Properties of Silica-Immobilized Bovine Serum Albumin"; <i>Journal of Chromatographic Science</i> , Vol. 39 pp. 205-12. (2001)
	Andersson et al.: "Direct Liquid Chromatographic Separation of Enantiomers on Immobilized Protein Stationary Phases: IX. Influence of the cross-linking reagent on the retentive and enantioselective properties of chiral sorbents based on bovine serum albumin"; <i>Journal of Chromatography</i> , Vol. 591 pp. 65-73 (1992)
	Yang & Hage, "Characterization of the Binding and Chiral Separation of D- and L-Tryptophan on a High-Performance Immobilized Human Serum Albumin Column"; <i>Journal of Chromatography</i> , Vol. 645 pp.241-250 (1993)
	Noctor et al.: "Stereochemical Resolution of Enantiomeric 2-Aryl Propionic Acid Non-Steroidal Anti-Inflammatory Drugs on a Human Serum Albumin Based High-Performance Liquid Chromatographic Chiral Stationary Phase"; <i>Chromatographia</i> , Vol. 31 pp. 55-69 (1991)
	Krug et al.: "Stereoselective Differences in the Binding of N-Methylated Barbiturates to Human Serum Albumin," <i>Arzneim-Forsch.</i> , Vol. 44 pp. 109-113 (1994)
	Gotti et al.: "Analysis and Enantioresolution of Donepezil by Capillary Electrophoresis"; <i>Journal of Pharmaceutical and Biomedical Analysis</i> , Vol. 24(5-6) pp. 863-870 (2001)
	Haginaka: "Protein-based Chiral Stationary Phases for High-Performance Liquid Chromatography Enantioseparations"; <i>Journal of Chromatography</i> , Vol. 906(1-2) pp. 253-273 (2001)
	Chiari et al.: "Evaluation of New Adsorbed Coatings in Chiral Capillary Electrophoresis and the Partial Filling Technique," <i>Electrophoresis</i> , Vol. 21(12) pp. 2343-51 (2000)
	Haginaka: "Enantiomer Separation of Drugs by Capillary Electrophoresis Using Proteins as Chiral Selectors"; <i>Journal of Chromatography</i> , Vol. 875(1-2) pp. 235-54. (2000)
	Ding et al.: "Study of Interaction Between Drug Enantiomers and Serum Albumin by Capillary Electrophoresis"; <i>Electrophoresis</i> , Vol. 20(9) pp. 1890-4 (1999)
	Birnbaum and Nilsson: "Protein-Based Capillary Affinity Gel Electrophoresis for the Separation of Optical Isomers"; <i>Anal. Chem.</i> , Vol. 64 pp. 2872-2874 (1992)
	Arai et al.: "Chiral Separation by Capillary Affinity Zone Electrophoresis Using an Albumin-Containing Support Electrolyte"; <i>Anal. Biochem.</i> , Vol. 217 pp.7-11 (1994)
	Lloyd et al.: "Selectivity in Capillary Electrophoresis: The Use of Proteins"; <i>Journal of Chromatography A</i> , Vol. 792(1-2) pp.349-69 (1997)
	Hayball et al.: "Influence of Octanoic Acid on the Reversible Protein Binding of Ketorolac Enantiomers to Human Serum Albumin 9HSA"; Comparative Liquid Chromatographic Studies Using a NSA Chiral Stationary Phase"; <i>Journal Chromatography B.</i> , Vol. 662 pp. :128-33 (1994)

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-----------------	------------------------



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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
		Domenici et al.: "Use of a Human Serum Albumin-Based High-Performance Liquid Chromatography Chiral Stationary Phase for the Investigation of Protein Binding: Detection of the Allosteric Interaction between Warfarin and Benzodiazepine Binding Sites"; <i>Journal of Phar. Sci.</i> , Vol. 80 pp. 164-166 991)	
		Dockal et al.: "The Three Recombinant Domains of Human Serum Albumin"; <i>J. Biol. Chem.</i> , Vol. 274 pp.29303-29310 (1999)	
		Peters, T.: "All About Albumin: biochemistry, genetics, and medical applications", <i>Academic Press</i> , New York. 79-131 pp. 170-181; 36-table 2.4 1996	
		Khan, M. et al.: "Bilirubin Binding Properties of Pigeon Serum Albumin and its Comparison with Human Serum Albumin"; <i>Int. J. Biol. Macromol.</i> , Vol. 30(3-4) pp.171-8 (2002)	
		Stoltz, J.F. et al.: "Chromatographic Purification of Human Albumin for Clinical Uses"; <i>Pharmaceut. Tech. Int.</i> pp. 60-65 (June 1991)	
		More & Harvey: "Blood Separation and Plasma Fractionation", Ed. Harris, Wiley-Liss, Inc. pp. 261-306 (1991)	
		Chen, R.: "Removal of Fatty Acids from Serum Albumin by Charcoal Treatment"; <i>J. Biol. Chem.</i> , Vol. 242 pp. 173-181 (1967)	
		Bradford, M.: "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding"; <i>Analytical Biochemistry.</i> , Vol. 72 pp. 248-254 (1976)	
		Bertucci, C. et al.: "Binding Properties of Human Albumin Modified by Covalent Binding of Penicillin"; <i>Elsevier Science B.V., Biochimica et Biophysica Acta</i> 1544 pp. 386-392 (2001)	
		Denton & Harris: "High-Performance Capillary Electrophoretic Separation of Human Serum Albumin Using a Neutral Coated Capillary"; <i>J. Chromatogr. A.</i> , Vol 705 pp. 335-341 (1995)	
		Lepri, L. et al.: "Thin Layer Chromatographic Enantioseparation of Miscellaneous Compounds with Bovine Serum Albumin the Eluent"; <i>Journal of Planar Chromatography - Modern TLC</i> , Vol. 6(2) pp. 100-104 (1993)	
		Bertucci, C. et al.: "Site I on Human Albumin Differences in the Binding of (R)- and (S)- Warfarin"; <i>Chirality</i> , Vol. 11(9) pp. 675-679 (1999)	
		Kragh-Hansen: "Structure and Ligand Binding Properties of Human Serum Albumin"; <i>Danish Medical Bulletin</i> , Vol. 37 pp. 57-84 (1990)	
		Simpson, W. et al.: "Binding of Streptococcal Lipoteichoic Acid to the Fatty Acid Binding Sites on Serum Albumin"; <i>Journal of Biological Chemistry</i> , Vol 255(13)pp. 6092-6097 (1980)	
		Sudlow, G. et al.: "The Characterization of Two Specific Drug Binding Sites on Human Serum Albumin"; <i>Mol. Pharmacol.</i> , Vol 11 pp. 824-832 (1975)	
		Ascoli, G. et al.: "Stereospecific and Competitive Binding of Drugs to Human Serum Albumin: Difference Circular Dichroism Approach"; <i>J. Pharm, Sci.</i> , Vol. 84 pp. 737-741 (1995)	
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		Yang & Hage.: "Effect of Mobile Phase Composition on the Binding Kinetics of Chiral Solutes on a Protein-Based High-Performance Liquid Chromatography Column: Interactions of D- and L-Tryptophan with Immobilized Human Serum Albumin"; <i>J. Chromatogr. A.</i> , Vol. 766(1-2) pp. 15-25 (1997)	
		Ahmed & Lloyd.: "Effect of Organic Modifiers on Retention and Enantiomeric Separations by Capillary Electrophoresis with Human Serum Albumin as a Chiral Selection in Solution"; <i>J. Chromatogr. A.</i> , Vol. 766 pp. 237-244 (1997)	
		Loun and Hage.: "Chiral Separation Mechanism in Protein-Based HPLC Columns. 1. Thermodynamic Studies of (R)- and (S)-Warfin Binding to Immobilized Human Serum Albumin, <i>Anal. Chem.</i> , Vol. 66 pp. 3184-3 822. Thompson et al., 1994, <i>Nucleic Acids Research</i> , 22:4673-80 (1994)	
		Domenici, E. et al.: "Immobilized Serum Albumin: Rapid HPLC Probe of Stereoselective Protein-Binding Interactions"; <i>Chirality</i> , Vol. 2(4) pp. 263-268 (1990)	
		Andrisano et al.: "CLUSTAL W: Improving the Sensitivity of Progressive Multiple Sequence Alignment through Sequence Weighting, Position-Specific Gap Penalties and Weight Matrix Choice": "Enantioselective Separation of Chiral Aryxylic Acids on an Immobilized Human Serum Albumin Chiral Stationary Phase"; <i>Chirality</i> , Vol. 9 pp. 178-183 (1997)	
		Zhu et al.: "Study of Enantioselective Interactions Between Chiral Drugs and Serum Albumin by Capillary Electrophoresis"; <i>Electrophoresis</i> , Vol. 20 pp.1869-1877 (1999)	
		Andrisano et al.: "Capillary Electrophoretic and High-Performance Liquid Chromatographic Studies of the Enantioselective Separation of α - Adrenoreceptor Antagonists"; <i>J. Chromatogr. A</i> , Vol. 803 pp. 189-195 (1998)	
		Zhikova & Russeva: "Stereoselective Binding of Ketoprofen Enantiomers to Human Serum Albumin Studies by High-Performance Liquid Affinity Chromatography"; <i>J. Chromatogr. B</i> , Vol. 714 pp. 277-283 (1998)	
		Lagercrantz et al.: "Stereoselective Binding of the Enantiomers of Warfarin and Tryptophan To Serum Albumin from some Different Species Studied by Affinity Chromatography on Columns of Immobilized Serum Albumin"; <i>Comp. Biochem. Physiol.</i> , Vol. 69C pp. 375-378. (1981)	
		Thompson et al.: "CLUSTAL W: Improving the Sensitivity of Progressive Multiple Sequence Alignment through Sequence Weighting, Position-Specific Gap Penalties and Weight Matrix Choice"; <i>Nucleic Acids Research</i> , Vol. 22 pp. 4673-80 (1994)	
		www.sigmaaldrich.com: Product Detail "Product Name Albumin from Human Serum"; [online] [Retrieved on 14/5/2003] Retrieved from Internet using <URL http://www.sigmaaldrich.com/c.gibin/hsrun/Distributed/HahtShop/HAHTpa.ge/frmCatalogSearchPost? Brand=Sigma&ProdNo=3782 (4 pp.)	
		Search results of non-human albumin used to separate enantiomers.	
Examiner		Date Considered	